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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,495	11/06/2003	Jean-Baptiste Galey	232979US0	7627

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.		
1940 DUKE STREET		
ALEXANDRIA, VA 22314		

EXAMINER	
HENRY, MICHAEL C	

ART UNIT	PAPER NUMBER
1623	

NOTIFICATION DATE	DELIVERY MODE
01/03/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/701,495	Applicant(s) GALEY, JEAN-BAPTISTE	
	Examiner Michael C. Henry	Art Unit 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-15 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-15, 17-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/07 has been entered.

The amendment filed 10/31/07 affects the application, 10/701,495 as follows:

1. The responsive to applicants' arguments is contained herein below.

Claims 1-6, 8-15, 17-23 are pending in application

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 8, 21, 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Dobson et al. (US 6,423,327 B1).

In claim 1, applicant claims "A method for softening expression lines on a face and/or forehead in need thereof, comprising topically applying a composition to one or more zones of the face or forehead marked with expression lines a composition comprising at least one compound selected from the group consisting of adenosine and adenosine analogues and a physiologically acceptable medium." Dobson et al. disclose a method for enhancing the

condition of skin in a mammal by reducing (softening) wrinkles, roughness, dryness, or laxity of the skin, comprising topically applying to the skin a composition comprising adenosine (see claim 1 and claims 2-10). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1st line of 2nd paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2nd paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Dobson et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Claim 8, which is drawn to a method of claim 1, wherein said composition comprises adenosine, is also anticipated by Dobson et al., since Dobson et al.'s composition also comprises adenosine (see claim 1 and claims 2-10). Claims 21 and 22, which are drawn to a method of claims 1 and 8 respectively, comprising the topical application to the skin an effective amount of said composition to reduce laugh lines and/or reduce frown lines, are also anticipated by Dobson et al., since Dobson et al.'s composition also reduces wrinkles (which includes frown lines and laugh lines-types of wrinkles) and contains adenosine (see claim 1 and claims 2-10). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur.

Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2nd paragraph and entire article).

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Lapinet et al. (US 3,978,213).

In claim 1, applicant claims "A method for softening expression lines on a face and/or forehead in need thereof, comprising topically applying a composition to one or more zones of the face or forehead marked with expression lines a composition comprising at least one compound selected from the group consisting of adenosine and adenosine analogues and a physiologically acceptable medium." Lapinet et al. disclose applicant's method of softening and enhancing the natural elasticity of the skin comprising applying topically to human skin a composition comprising an adenosine analogue, cyclic 3',5'-adenosine monophosphate (see claims 1-2 and col. 2, line 48- col. 4, line 7). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, it should be noted that the examiner considers that the softening of skin also includes a softening of lines especially since Lapinet also disclose that wrinkles (expression lines) are decreased (softened) by said treatment (see col. 4, lines 3-7) and that said treatment is applied to soften and soothe human skin that is wrinkled and dry (see col. 1, lines 47-52). It must also be noted that Lapinet et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Claim 2, which is drawn

to the method according to claim 1 wherein said composition comprises an adenosine analogue, is also encompassed by this rejection, since Lapinet et al.'s composition also comprises the adenosine analogue, cyclic 3',5'-adenosine monophosphate (see claims 1-2 and col. 2, line 48-col. 4, line 7). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, it should be noted that the examiner considers that the softening of skin also includes a softening of lines especially since Lapinet also disclose that wrinkles (expression lines) are decreased (softened) by said treatment (see col. 4, lines 3-7) and that said treatment is applied to soften and soothe human skin that is wrinkled and dry (see col. 1, lines 47-52). It must also be noted that Lapinet et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6, 9-15, 17-20, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobson et al. (US 6,423,327 B1).

In claim 1, applicant claims "A method for softening expression lines on a face and/or forehead in need thereof, comprising topically applying a composition to one or more zones of the face or forehead marked with expression lines a composition comprising at least one

compound selected from the group consisting of adenosine and adenosine analogues and a physiologically acceptable medium.” Claim 3 is drawn to the method according to claim 1, wherein said composition comprises at least one adenosine analogue including 2'-deoxyadenosine 2', 3'-isopropylidene adenosine; toyocamycin, 1-methyladenosine

Dependent claims 4-6 and 9 are drawn to a method wherein the composition comprises specific % by weight of adenosine and/or adenosine analogue. Dependent claims 10-15, 17-20 are drawn to a method wherein the composition has a specific relaxing effect, the use of specific adenosine analogues, specific % by weight of adenosine and/or adenosine analogue and the application of the composition on specific locations on the face. Claim 23 is drawn to a method for softening expression lines on a face and/or forehead in need thereof, comprising topically applying a composition to one or more zones of the face or forehead marked with expression lines a composition comprising adenosine in an amount of from 0.01% to 1% by weight with respect to the total composition and a physiologically acceptable medium.

Dobson et al. disclose a method for enhancing the condition of skin in a mammal by reducing (softening) wrinkles, roughness, dryness, or laxity of the skin, comprising topically applying to the skin a composition comprising adenosine (see claim 1 and claims 2-10). Dobson et al. disclose that adenosine and suitable adenosine analogues are suitable for use in enhancing skin condition (see col. 3, lines 35-64). Furthermore, Dobson et al. disclose that adenosine analogues such as adenosine agonists, adenosine receptor agonists, and compounds that increase intracellular or extracellular adenosine levels are suitable for use in the invention (see col. 3, lines 35-64). Examples of some adenosine analogues disclosed by Dobson et al. as useful in the method include 2'-deoxyadenosine 2', 3'-isopropylidene adenosine; toyocamycin, 1-

methylenadenosine (see col. 3, lines 40-64). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1st line of 2nd paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2nd paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Dobson et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Furthermore, the examiner considers the relaxing effect on contractile fibroblast (as recites in claim 10), an effect or means by which said wrinkles or roughness are being reduced.

The difference between applicant's claimed method and the method of Dobson et al. is that Dobson et al. do not disclose the specific % by weight of adenosine and/or adenosine analogue nor the application of the composition on specific locations on the face or skin. However, the use of specific % by weight of adenosine and/or adenosine analogue or the application of the composition on specific locations on the face or skin, depends on factors like the severity of the skin or facial condition (such as wrinkles), the location of the condition and the kind of subject or mammal being treated.

It would have been obvious to one having ordinary skill in the art, at the time the claimed invention was made to have used the method of Dobson et al. to treat wrinkles or enhance skin or relax facial features with a composition comprising adenosine or adenosine analogue, and to use different % by weight of adenosine or adenosine analogue at the required location, based on factors like the severity of the skin or facial condition (such as wrinkles), and the kind of subject or mammal being treated.

One having ordinary skill in the art would have been motivated to use the method of Dobson et al. to treat wrinkles or enhance skin or relax facial features with a composition comprising adenosine or adenosine analogue, and to use different % by weight of adenosine or adenosine analogue at the required location, based on factors like the severity of the skin or facial condition (such as wrinkles), and the kind of subject or mammal being treated.

Response to Arguments

Applicant's arguments with respect to claims 1-6, 8-15 and 17-23 have been considered but are not found convincing.

The applicant argues that as demonstrated by Exhibits A-C cited by the Office Action, expression lines differ from other wrinkles such as those caused by sun damage, and expression lines are "difficult to treat." Thus, merely because a reference might disclose methods of treating other types of less difficult-to-treat wrinkles, it does not mean that such a reference (directed to a different type of wrinkle) teaches or suggests anything about how to treat expression lines. In other words, for example, a disclosure related to treating wrinkles caused by sun damage cannot teach or suggest how to treat expression lines, which are recognized as being different, more difficult-to-treat types of wrinkles. However, Dobson et al. disclose a method for enhancing the

condition of skin in a mammal by reducing (softening) wrinkles, roughness, dryness, or laxity of the skin, comprising topically applying to the skin a composition comprising adenosine (see claim 1 and claims 2-10). That is, Dobson et al.'s method includes the treatment of wrinkles in general (i.e., all types of wrinkles including expression lines) and is not limited to any particular type of wrinkle such as wrinkles caused by sun damage. Furthermore, Dobson et al. do not disclose that any particular type of wrinkle is more difficult or easier to treat than others.

The applicant argues that by way of analogy, baldness can be caused by different mechanisms such as, for example, alopecia or testosterone-related baldness. However, whereas testosterone-related baldness might be treatable using compounds which inhibit testosterone production or inhibit conversion of testosterone to active forms, alopecia cannot be treated using such compounds. Thus, although the effect (baldness) is the same, treatment methods are not interchangeable for the different types of baldness. However, Dobson et al. disclose a method for enhancing the condition of skin in a mammal by reducing (softening) wrinkles, roughness, dryness, or laxity of the skin, comprising topically applying to the skin a composition comprising adenosine (see claim 1 and claims 2-10). That is, Dobson et al.'s method includes the treatment of wrinkles in general (i.e., all types of wrinkles including expression lines) and is not limited to any particular type of wrinkle such as wrinkles caused by sun damage. Furthermore, Dobson et al. do not disclose that any particular type of wrinkle is more difficult or easier to treat than others. Consequently, a skilled artisan would expect to use Dobson et al.'s compound to treat all types of wrinkles (including expression lines). In fact, Dobson et al.'s compound may be more effective on wrinkles that are expression lines. Also, it should also be noted that applicant uses the same compound as Dobson et al.'s to treat wrinkles (expression lines). This indicates that a

particular compound (such as Dobson et al.'s compound) can be used to treat different types of wrinkles (including expression lines). Thus, a comparison of baldness to wrinkles (two distinctly different conditions) is irrelevant especially.

The applicant argues that treatment methods for treating one type of wrinkle are not interchangeable with methods for treating expression lines. However, expression lines are a type of wrinkle and Dobson et al.'s treat wrinkles in general (i.e., all types of wrinkles including expression lines) not just one kind of wrinkle.

The applicant argues that Neither Dobson nor Lapinet teaches or suggests softening expression lines by applying an adenosine compound thereto. Both Dobson and Lapinet teach treating wrinkles or damaged skin caused by sun, age and/or environmental factors such as wind. (See, Dobson at col. 1, lines 28-34 and Lapinet at col. 1, lines 49-56). However, Dobson et al. disclose a method for enhancing the condition of skin in a mammal by reducing (softening) wrinkles, roughness, dryness, or laxity of the skin, comprising topically applying to the skin a composition comprising adenosine (see claim 1 and claims 2-10). That is, Dobson et al.'s method includes the treatment of wrinkles in general (i.e., all types of wrinkles including expression lines) and is not limited to any particular type of wrinkle such as wrinkles caused by sun damage. Furthermore, Dobson et al. does not disclose that any particular type of wrinkle is more difficult or easier to treat than others. In addition, Lapinet et al. disclose applicant's method of softening and enhancing the natural elasticity of the skin comprising applying topically to human skin a composition comprising an adenosine analogue, cyclic 3',5'-adenosine monophosphate (see claims 1-2 and col. 2, line 48- col. 4, line 7). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and

especially since that is where wrinkles (including expression lines) generally occur.

Furthermore, it should be noted that the examiner considers that the softening of skin also includes a softening of lines especially since Lapinet also disclose that wrinkles (expression lines) are decreased (softened) by said treatment (see col. 4, lines 3-7) and that said treatment is applied to soften and soothe human skin that is wrinkled and dry (see col. 1, lines 47-52). It must also be noted that Lapinet et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines.

The applicant argues that as explained in the present specification (pages 2-4), the conditions treated by Dobson and Lapinet are different from expression lines: their causes are different and their treatments are different. For example, whereas wrinkles are caused by lack of collagen and can be addressed through collagen protection and/or synthesis, expression lines are caused by different mechanisms and cannot be addressed by increasing or protecting collagen. Thus, although Dobson and Lapinet teach addressing collagen-related conditions such as wrinkles or moisture-related conditions such as dry skin, these references neither teach nor suggest reducing or softening conditions unrelated to collagen or moisturization levels. Because expression lines are not collagen or moisturization-related, neither Dobson nor Lapinet could possibly teach or suggest anything concerning treatment of this condition. However, the conditions treated by Dobson and Lapinet are not different from expression lines since Dobson et al.'s method treats wrinkles in general (i.e., all types of wrinkles including expression lines) and is not limited to any particular type of wrinkle. Also, the mechanism or manner by which the expression lines are produced does not alter the fact that it is a wrinkle or a type of wrinkle and

that Dobson et al. disclose reducing (softening) wrinkles (expression lines) with the same composition as applicant. Furthermore, although applicant argues that the treatments for wrinkles do not effect expression lines (which are also wrinkles), it should be noted that the method of applicant's previously presented dependent claims 21 and 22 involves decreasing wrinkles with the same said composition as Dobson et al. This implies that the applicant also considers expression lines as been wrinkles (see previously presented claims 21 and 22 of the instant invention). Also, Dobson et al. disclose a method for enhancing the condition of skin in a mammal by reducing (softening) wrinkles, roughness, dryness, or laxity of the skin, comprising topically applying to the skin a composition comprising adenosine (see claim 1 and claims 2-10). That is, Dobson et al.'s method includes the treatment of wrinkles in general (i.e., all types of wrinkles including expression lines) and is not limited to any particular type of wrinkle such as wrinkles caused by sun damage. Furthermore, Dobson et al. do not disclose that any particular type of wrinkle is more difficult or easier to treat than others. Consequently, a skilled artisan would expect to use Dobson et al.'s compound to treat all types of wrinkles (including expression lines). In fact, Dobson et al.'s compound may be more effective on wrinkles that are expression lines. Also, it should also be noted that applicant uses the same compound as Dobson et al.'s to treat wrinkles (expression lines). In addition, applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1st line of 2nd paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2nd paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles.

Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2nd paragraph and entire article).

The applicant argues that neither Dobson nor Lapinet teaches or suggests anything concerning treatment of the condition (expression lines), let alone the specific amounts of adenosine required in claim 23. However, One having ordinary skill in the art would have been motivated to use the method of Dobson et al. to treat wrinkles (which includes expression lines) or enhance skin or relax facial features with a composition comprising adenosine or adenosine analogue, and to use different % by weight of adenosine or adenosine analogue at the required location, based on factors like the severity of the skin or facial condition (such as wrinkles), and the kind of subject or mammal being treated.

Conclusion

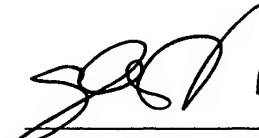
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Henry whose telephone number is 571-272-0652. The examiner can normally be reached on 8.30am-5pm; Mon-Fri. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Michael C. Henry

 12/21/07

Shaojia Anna Jiang, Ph.D.
Supervisory Patent Examiner
Art Unit 1623

December 20, 2007.